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09/647,964	01/08/2001	Kazuyuki Sakoda	09812.0511-00000	7471

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EXAMINER

NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/647,964

Applicant(s)

SAKODA ET AL.

Examiner

Toan D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11-17,25,27-33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) 18-24 and 40-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-15,25,27-33 and 35-39 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The applicant is advised to cancel claims 18-24, and 40-47 in the next Office correspondence.

Claim Rejections - 35 USC § 112

2. Claims 1, 3-8, 25, 27-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the state of the communication line" in line 27. There is insufficient antecedent basis for this limitation in the claim. Similar problems exist in claim 25 line 22, and claim 32 line 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 25, 30, 33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Eng et al. (US 5,751,708).

As far as understood with respect to claim 25, Eng et al. disclose access method for broadband and narrowband networks, comprising:

generating, in the terminal apparatus (figure 1, references 10, 20, and 30) a request signal requesting distribution of information (col. 4 lines 7-13);

transmitting the request signal from the terminal apparatus to the server apparatus (col. 4 lines 7-13);

scheduling, in the server apparatus a distribution time for distribution over a communication line (col. 8 lines 32-34) in accordance with the request signal (col. 5 lines 38-50);

distributing information from the server apparatus to the terminal apparatus at the distribution time (col. 5 lines 38-50); and

receiving, in the terminal apparatus the information distributed from the server apparatus (col. 5 lines 38-50), wherein

the request signal included time limit information indicating a time limit of distribution of the information figure 4, reference step 402, col. 6 lines 14-18); and

the distribution time is scheduled based on the time limited information of the request signal and the state of the communication line (col. 6 lines 22-31).

For claim 30, Eng et al. disclose wherein the terminal apparatus communicates with the server apparatus through a wireless transmission base station (col. 3 lines 45-53).

For claim 33, Eng et al. disclose access method for broadband and narrowband networks, comprising:

generating a request signal requesting the distribution of the information the request signal comprising time limit information indicating a time limit for distribution of the information (figure 4, reference step 402, col. 4 lines 7-13, and col. 6 lines 11-18);

transmitting the requested signal to the server apparatus (figure 4, reference step 402, col. 4 lines 7-13, and col. 6 lines 11-18); and

receiving the information distributed by the server apparatus during a distribution time scheduled by the server apparatus (figure 4, reference steps 404-405, col. 6 lines 22-31).

For claim 35, Eng et al. disclose further comprising generating the request signal comprising a signal including distribution information designating a desired region or time band or both desired for distribution of information as said request signal (col. 5 lines 21-30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 5-9, 11-14, 31-32, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al. (US 5,751,708) in view of Eggleston et al. (US 5,764,899).

As far as understood with respect to claims 1, 5, 7, and 8, Eng et al. disclose access method for broadband and narrowband networks, comprising:

the server apparatus (figure 1A, reference 101) comprising:

a first transceiver (figure 1A, reference 102) for communication with the terminal apparatus and for receiving the request signal from the terminal apparatus requesting information (col. 3 lines 48-58, and col. 6 lines 22-25); and

a first controller (figure 1A, reference 101) for scheduling a distribution time over a communication line (col. 8 lines 32-34) in accordance with the request signal and for controlling the system for the distribution of the information to the terminal apparatus through the first transceiver at the distribution time (col. 5 lines 38-50), and

the terminal apparatus (figure 1, references 10, 20, and 30) comprising:

transmit-request (Xmt_Req) (col. 5 lines 21-25) for communication with the server apparatus (figure 1A, reference 101); and

generating the request signal for requesting the distribution of the information (col. 4 lines 7-13), for controlling the system for transmission of the requested signal to the server apparatus (figure 1A, reference 101) through the second transceiver (col. 4 lines 7-13), and for controlling the system for reception of the information distributed by

the server apparatus in a period of time determined by the server apparatus (col. 5 lines 38-50), wherein

the request signal comprises time limit information indicating a time limit for distribution of the information (figure 4, reference step 402, col. 6 lines 14-18); and

the first controller schedules the distribution time based on the time limited for distribution and the state of the communication line (col. 6 lines 22-31).

However, Eng et al. do not expressly disclose a second transceiver, and a second controller. In an analogous art, Eggleston et al. disclose a second transceiver (figure 2, reference 202, col. 5 lines 28-31), and a second controller (figure 2, reference 207, col. 5 lines 20-21).

Eggleston et al. disclose wherein the first controller of the server apparatus calculates an amount of charge for the distribution of the information based on a length of time until the time limit of distribution and performs processing for charging the terminal apparatus based on the calculated amount of charge (col. 7 lines 11-16, and col. 15 lines 26-41 as set forth in claim 5), wherein the first controller of the server apparatus calculates an amount of charge for the distribution of the information based on an efficiency of use of a communication resource in communication between the terminal apparatus and the base station and performs processing for charging the terminal apparatus based on the calculated amount of charge (col. 7 lines 11-16, and col. 15 lines 26-41 as set forth in claim 7), and wherein the first controller of the server apparatus calculates cost information indicating communication costs based on the state of the communication line by region, by time band, or by time band for individual

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regions and controls the system for distribution of the calculated cost information to the terminal apparatus; the second controller of the terminal apparatus generates the request signal comprising a signal including distribution information designating a desired region or desired time band or both for distribution of information; and the server apparatus schedules the system for the distribution of information to the designated region and time band based on the request signal (col. 14 lines 2-10 as set forth in claim 8).

One skilled in the art would have recognized the second transceiver, and the second controller, and would have applied Eggleston et al.'s case client 201 in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Eggleston et al.'s method and apparatus for communicating an optimized reply in Eng et al.'s access method for broadband and narrowband networks with the motivation being to provide a transceiver (if using rf or infrared communications) and a modulator-demodulator (or modem) 202 to connect to a wireless or wireline communications network (col. 5 lines 28-31).

For claim 6, Eng et al. disclose wherein the second transceiver of the terminal apparatus communicates with the server apparatus through a wireless transmission base station (col. 3 lines 45-53).

For claims 9, 11, 14, 31-32, and 36, Eng et al. disclose access method for broadband and narrowband networks, comprising:

transmit-request (Xmt_Req) (col. 5 lines 21-25) for communication with the server apparatus; and

generating a request signal for requesting the distribution of the information, for controlling the system for transmission of the requested signal to the server apparatus (figure 1A, reference 101)(col. 4 lines 7-13), and controlling the system for reception of the information distributed by the server apparatus in a distribution time scheduled by the server apparatus (col. 5 lines 38-50), wherein the request signal comprises a signal including time limit information indicating a time limit for distribution of the information (col. 6 lines 14-18).

However, Eng et al. do not expressly disclose a transceiver, and a controller. In an analogous art, Eggleston et al. disclose a transceiver (figure 2, reference 202, col. 5 lines 28-31), and a controller (figure 2, reference 207, col. 5 lines 20-21).

Eggleston et al. disclose further comprising an interface for providing information to a user, wherein the controller controls the system for providing the distribution time to the interface (col. 5 lines 25-26 as set forth in claim 11), wherein the controller controls the system for receiving cost information from the server apparatus and providing to the user through the interface the cost information based on a state of a communication line by region, by time band, or by time band for individual regions (col. 7 lines 14-10 as set forth in claim 14), wherein the server apparatus calculates an amount of charge for the distribution of the information based on an efficiency of use of a communication resource in communication between the terminal apparatus and the base station and performs processing for charging the terminal apparatus based on the calculated amount of charge (col. 7 lines 11-16, and col. 15 lines 26-41 as set forth in claim 31), and wherein the server apparatus calculates cost information indicating communication

costs based on the state of the communication line by region, by time band, or by time band for individual regions and controls the system for distribution of the calculated cost information to the terminal apparatus; the terminal apparatus generates the signal request comprising a signal including distribution information designating a region or time band or both for communication of information; and the server apparatus schedules the distribution of information to the designated region and time band based on the request signal (col. 14 lines 2-10 as set forth in claim 32), and further comprising receiving from the server apparatus cost information indicating communication costs based on a state of a communication line by region or by time band or by time band for individual regions (col. 14 lines 2-10 as set forth in claim 36).

One skilled in the art would have recognized the transceiver, and the controller, and would have applied Eggleston et al.'s case client 201 in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Eggleston et al.'s method and apparatus for communicating an optimized reply in Eng et al.'s access method for broadband and narrowband networks with the motivation being to provide a transceiver (if using rf or infrared communications) and a modulator-demodulator (or modem) 202 to connect to a wireless or wireline communications network (col. 5 lines 28-31).

For claim 12, Eng et al. disclose wherein the transceiver communicates with the server apparatus through a wireless transmission base station (col. 3 lines 45-56).

For claim 13, Eng et al. disclose wherein the controller generates the request signal comprising a signal including distribution information designating a desired region

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or desired time band or both distribution of information (col. 5 lines 21-30, and col. 6 lines 14-18).

8. Claims 3-4, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al. (US 5,751,708) in view of Eggleston et al. (US 5,764,899) further in view of Aitkenheadi et al. (US 5,493,695).

For claims 3-4, and 15, Eng et al. in view of Eggleston et al. do not expressly disclose wherein the first controller of the server apparatus detects a traffic load of the communication line and distributes the information when the traffic load is small. In an analogous art, Aitkenheadi et al. disclose wherein the first controller of the server apparatus detects a traffic load of the communication line and distributes the information when the traffic load is small (col. 3 lines 52-54).

Aitkenheadi et al. disclose wherein the terminal apparatus further comprises an interface for providing information to a user, the server apparatus schedules the distribution time by estimating a period time before the time limit of distribution when the traffic load of the communication line is small, controls the system for notification of the distribution time to the terminal apparatus, and schedules the distribution of information at the distribution time, and the second controller of the terminal apparatus controls the system for providing the distribution time to the interface (col. 5 lines 40-41 as set forth in claim 4), and wherein the terminal apparatus controls the system for receiving a period of time from the server apparatus and providing to the interface the period of time before a time limit of distribution and time band in which a traffic load of a communication line is small (col. 5 lines 40-41 as set forth in claim 15).

One skilled in the art would have recognized the wherein the first controller of the server apparatus detects a traffic load of the communication line and distributes the information at a period of time when the traffic load is small, and would have applied Aitkenheadi et al.'s traffic monitoring in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Aitkenheadi et al.'s trunking radio system with frequency diversity in Eng et al.'s access method for broadband and narrowband networks with the motivation being to provide the traffic monitoring means 25 of the controller to determine that there is more than one channel available for allocation (col. 3 lines 50-52).

9. Claims 27-28, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al. (US 5,751,708) in view of Aitkenheadi et al. (US 5,493,695).

For claims 27-28, and 37, Eng et al. do not expressly disclose wherein the server apparatus detects a traffic load of the communication line and schedules distribution of the information when the traffic load is small. In an analogous art, Aitkenheadi et al. disclose wherein the server apparatus detects a traffic load of the communication line and schedules distribution of the information when the traffic load is small (col. 3 lines 52-54).

Aitkenheadi et al. disclose wherein, when receiving the request signal, the server apparatus schedules the distribution time by estimating a period of time before the time limit for distribution when the traffic load of the communication line is small, sends notification of the distribution time to the terminal apparatus, and distributes the information at the distribution time (col. 5 lines 40-41 as set forth in claim 28), and

further comprising providing a user with a period of time before the time limit of distribution when a traffic load of a communication line is small (col. 5 lines 40-41 as set forth in claim 37).

One skilled in the art would have recognized the wherein the first controller of the server apparatus detects a traffic load of the communication line and distributes the information at a period of time when the traffic load is small, and would have applied Aitkenhead et al.'s traffic monitoring in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Aitkenhead et al.'s trunking radio system with frequency diversity in Eng et al.'s access method for broadband and narrowband networks with the motivation being to provide the traffic monitoring means 25 of the controller to determine that there is more than one channel available for allocation (col. 3 lines 50-52).

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al. (US 5,751,708) in view of Aitkenhead et al. (US 5,493,695) further in view of Eggleston et al. (US 5,764,899).

For claim 29, Eng et al. in view of Aitkenhead et al. do not expressly disclose wherein the server apparatus calculates an amount of charge for distribution of information based on a length of time until the time limit of distribution and performs processing for charging the terminal apparatus based on the calculated amount of charge. In an analogous art, Eggleston et al. disclose wherein the server apparatus calculates an amount of charge for distribution of information based on a length of time until the time limit of distribution and performs processing for charging the terminal

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apparatus based on the calculated amount of charge (col. 7 lines 11-16, and col. 15 lines 26-41).

One skilled in the art would have recognized the wherein the server apparatus calculates an amount of charge for distribution of information based on a length of time until the time limit of distribution and performs processing for charging the terminal apparatus based on the calculated amount of charge, and would have applied Eggleston et al.'s case client 201 in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Eggleston et al.'s method and apparatus for communicating an optimized reply in Eng et al.'s access method for broadband and narrowband networks with the motivation being to provide billing control (col. 15 lines 25-26).

11. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng et al. (US 5,751,708) in view of Baptist et al. (US 5,465,392).

For claims 38-39, Eng et al. disclose further comprising the steps of:

Internally measuring time (col. 6 lines 14-18);

receiving the distribution time from the server apparatus (col. 5 lines 38-50) and

reception of information distributed from the server apparatus near the

distribution time based on the distribution time and the internally measured (col. 5 lines 38-50).

However, Eng et al. do not expressly disclose controlling a power supply of a receiver. In an analogous art, Baptist et al. disclose controlling a power supply of a receiver (col. 3 lines 27-29, and col. 3 lines 39-42).

Baptist et al. disclose further comprising controlling the power supply of the receiver to cut the supply of power to at least part of the receiver when the receiver finishes receiving the information distributed by the server apparatus (col. 3 lines 51-52 as set forth in claim 39).

One skilled in the art would have recognized the power supply of a receiver, and would have applied Baptist et al.'s mobile station 24 in Eng et al.'s end user device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Baptist et al.'s apparatus and method for operating a wireless local area network having power conservation in Eng et al.'s access method for broadband and narrowband networks with the motivation being to control the wireless transceiver 60 (col. 3 lines 40-44).

Allowable Subject Matter

12. Claims 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed 01/22/07 have been fully considered but they are not persuasive.

The applicant argues with respect to claims 25 and 33, on page 17 first and second paragraphs, that Eng does not teach or suggest "the request signal includes time limit information indicating a time limit of distribution of the information," as recited in claim 25. The examiner disagrees. Applicant's attention is directed to Eng patent at

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col. 6 lines 14-18 (see figure 4, reference step 402), where Eng clearly teaches "Thereafter, the end-user device starts a timer (time limit information indicating a time limit of distribution of the information means), and stays in the Request State 402 until the communications controller/scheduler 101 acknowledges reception of the Xmt_Req signaling information by broadcasting its Access ID over the ACK channel 303."

On page 17, fourth paragraph, the applicant argues with respect to claims 1 and 9, although different scope from independent claims 25 and 33, each recite features similar to those of claims 25 and 33. The examiner refers to the same argument in claims 25 and 33 above. Therefore, dependent claims 3-8, 11-17, 27-33, and 35-39 are also rejected because they are depend on claims 1, 9, 25 and 33, respectively.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr.Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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